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EXAMINER	
KROFCHECK, MICHAEL C	

ART UNIT	PAPER NUMBER
2186	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/686,555	PREWITT, LEE	
	Examiner	Art Unit	
	Michael Krofcheck	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 October 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/28/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application 10/686,555 filed on 10/14/2003.

2. Claims 1-30 have been submitted and examined.

Drawings

3. New corrected formal drawings in compliance with 37 CFR 1.121(d) are required in this application because the informal drawings submitted are difficult to read. For example, the whole outer portion of figure 1 is illegible, and the hand written text throughout the figures is also difficult to read. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3-4, and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 3 recites the limitation "the original data set" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

7. With respect to claims 13 and 14, the phrase "properties function with respect to the memory" in claim 13 renders the claim confusing and indefinite as its metes and bounds are unclear. The claim appears to be directed towards the user interface function being a property of the memory. However, the examiner believes that the applicant intended for the user interface function of the OS for the memory to be accessible via a properties dialog box, however this is not evident in the claim. If this is what the applicant intended, the claim must be amended to state it.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 2, 4, 6, 8, 10, 12-14, 18, 20, 22, 24, 26, 28, 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Claims 2, 4, 6, 8, 10, 12-14, 18, 20, 22, 24, 26, 28, 30 are not limited to tangible embodiments. In view of the applicant's disclosure, specification page 6, paragraph 022, the carrier is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., disks) and intangible embodiments (e.g., signals). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

The examiner suggests that the applicant amend the affected claims to read, "A computer readable medium containing..." and amend paragraph 022 to read, "...computer programs on program mediums (such as disks)..." to overcome the rejection. The term carrier is used in the art to define a "current that vibrates at a fixed frequency, used to establish a boundary, or envelope, in which a signal is transmitted" (The Computer Desktop Encyclopedia), which is non-statutory subject matter.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. Claim 1-2, 5-10, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (AAPA), and Jeong US patent application publication 2002/0126552.

14. With respect to claim 1, AAPA teaches of a computer method for allowing access through a computer operating system user interface to prior and subsequent generations of data saved in a memory, comprising: (a) saving in a memory a first generation set of data and a first data address table specifying at least one location of the set of data in the memory; (b) receiving new data with which to modify the first generation set of data; (c) adding the new data to the memory while leaving the first generation set of data unchanged and saving in the memory a second data address table specifying at least one location of the new data (Applicant's specification, page 2, paragraphs 004-005);

Jeong teaches of (d) with a user interface accessible via a user interface function of the operating system of the computer, displaying identifiers of both the first generation data set and a second generation data set resulting from the first generation data set as modified by the new data which identifiers may by selected by a user using a feature of the operating system (fig. 4-5; paragraph 0024, 0026-0027; It is abundantly clear to one of ordinary skill in the art that the menu screens are accessible via a user interface function of the operating system of the computer, as all programs run on a computer are run under control/function of the OS, whether they are directly integrated into the OS or not).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA and Jeong at the time of the invention to include the display menus of Jeong in AAPA. Their motivation would have been to provide for simple selection and reproduction of sessions in multi-session disks (Jeong, paragraph 0008).

15. With respect to claim 2, the combination of AAPA and Jeong teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 1 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

16. With respect to claim 5, AAPA teaches of where the new data adds to the first generation data set without replacing data of the first generation data set (paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that the only way to change file contents, is to add new data, delete existing data, or modify existing data).

17. With respect to claim 6, the combination of AAPA and Jeong teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 5 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

18. With respect to claim 7, AAPA teaches of where the new data replaces at least a portion of the first generation data set (paragraph 005; paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that

the only way to change file contents, is to add new data, delete existing data, or modify existing data).

19. With respect to claim 8, the combination of AAPA and Jeong teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 7 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

20. With respect to claim 9, AAPA teaches of where the new data replaces at least a portion of the first generation data set with null data (paragraph 005; paragraph 005; it is abundantly clear to one of ordinary skill in the art that changing the file contents is the same as adding data, deleting data and modifying existing data, since it is commonly known that the only way to change file contents, is to add new data, delete existing data, or modify existing data. Null data is the equivalent of no data; replacing something with nothing is the same as deleting it).

21. With respect to claim 10, the combination of AAPA and Jeong teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 9 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

22. With respect to claim 15, the combination of AAPA and Jeong teaches of where the memory is a write-once memory (AAPA, paragraph 003; a CD-R is a write-once memory).

23. With respect to claim 16, the combination of AAPA and Jeong teaches of where the memory is a write-many memory (AAPA, paragraph 003; a CD-RW is a write-many memory).

24. Claims 3-4 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 1 above, and further in view of Soderstrom et al., US patent application publication 2001/0047454.

25. With respect to claim 3, Soderstrom teaches of a newly generated address table specifying locations in different sessions (paragraph 0035; where in modifying a single file, only that file is changed, and the specific references in the VAT, and the VAT ICB is rewritten to reference the VATs).

The combination of AAPA, Jeong, and Soderstrom teaches of receiving a selection of the second generation data set and then reading the data of the second generation data set (Jeong, fig. 4-5; paragraph 0026-0028),

including at least one data element of the original data set, according to address locations specified by at least the second data address table (in the combination of AAPA, Jeong, and Soderstrom, since the old data of prior sessions is addressed from a newer session, in copying that new session, the old data must be also read and copied, otherwise that newer session would have not been completely copied).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, and Soderstrom at the time of the invention to include the . Their motivation would have been to not require copying all of the same earlier data from an older session to the current session, thus saving disk space and allowing the copying process to occur quicker (Soderstrom, paragraph 0035).

26. With respect to claim 4, the combination of AAPA, Jeong, and Soderstrom teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 9 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

27. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 1 above, and further in view of Rao, US patent 5896493.

28. With respect to claim 11, Rao teaches of wherein the operating system is a Windows operating system (column 3, lines 66-67).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong and Rao at the time of the invention to control the computer system of the combination of AAPA and Jeong with a Windows operating system. Their motivation would have been to provide software control that is commonly used in the art and can run a significant portion of supplemental software that is written.

29. With respect to claim 12, the combination of AAPA, Jeong, and Rao teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 11 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

30. With respect to claim 13, the combination of AAPA, Jeong, and Rao teaches of where the user interface function of the operating system is a Properties function with respect to the memory (Jeong, paragraph 0025-0028).

31. With respect to claim 14, the combination of AAPA, Jeong, and Rao teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 13 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

32. Claims 13-14 are also rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Jeong, and Rao as applied to claim 12 above, and further in view of Dubal, US patent application publication 2003/0115509.

33. With respect to claim 13, Dubal teaches of accessing utility functions through the operating system properties dialog box (paragraph 0005).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, Rao and Dubal at the time of the invention to access the user interface

through the operating system properties dialog box in the combination of AAPA, Jeong, and Rao as taught in Dubal. Their motivation would have been to reduce the need to purchase and install external software.

34. With respect to claim 14, the combination of AAPA, Jeong, Rao, and Dubal teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 13 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

35. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Jeong as applied to claim 16 above, and further in view of Ohmi, US patent application publication 2002/0172123.

36. With respect to claim 17, Ohmi teaches of if an instruction is received to modify the first generation set of data, failing to carry out the instruction (paragraphs 0131-0137; it is abundantly clear to one of ordinary skill in the art, that when a request to change data while the write protection is enabled, that request is not implemented).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Jeong, and Ohmi at the time of the invention to incorporate write protection in the re-writable media of the combination of AAPA and Jeong. Their motivation would have been to prevent the user from accidentally overwriting desired data (Ohmi, paragraph 0137).

37. With respect to claim 18, the combination of AAPA, Jeong, and Ohmi teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 17 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

38. Claims 19-22 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Soderstrom.

39. With respect to claim 19, AAPA teaches of a computer method for organizing data address tables in a memory having sectors ranging from logically lowest to logically highest, comprising: (a) when writing a first data set to a memory having sectors, writing the data set to at least one lowest available sector of the memory (paragraph 004);

Soderstrom teaches of writing a first data address table which specifies logical locations of the first data set to at least one sector other than the lowest available sector of the memory (paragraph 0035; where the VAT can be placed on any location).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA and Soderstrom at the time of the invention to locate the VAT of AAPA in any location as taught in Soderstrom. Their motivation would have been to allow greater flexibility of the VAT, which can grow to be larger than multiple extents.

40. With respect to claim 20, the combination of AAPA and Soderstrom teaches of a computer readable carrier containing computer program instructions which, when run on

a computer, cause the computer to perform the method of claim 19 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

41. With respect to claim 21, AAPA teaches of without changing the data of the first data set, writing a second data set to at least one lowest available sector of the memory (paragraph 004-005);

Soderstrom teaches of writing a second data address table which specifies logical locations of the second data set to at least one sector other than the lowest available sector of the memory (paragraph 0035; where the changes made result in rewriting the affected portion of the VAT, which can be located in any location).

42. With respect to claim 22, the combination of AAPA and Soderstrom teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 21 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

43. With respect to claim 25, AAPA teaches of where the memory is a write-once memory (paragraph 003; a CD-R is a write-once memory).

44. With respect to claim 26, the combination of AAPA and Soderstrom teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 25 (it is abundantly

clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

45. With respect to claim 27, AAPA teaches of where the memory is a write-many memory (paragraph 003; a CD-RW is a write-many memory).

46. With respect to claim 28, the combination of AAPA and Soderstrom teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 27 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

47. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Soderstrom as applied to claim 19 above, and further in view of Hwang et al., US patent 5825726.

48. With respect to claim 23, Hwang teaches of where the one or more sectors to which the first data address table is written are the highest available sectors (fig. 7, abstract).

It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Soderstrom and Hwang at the time of the invention to write the VAT files of the combination of AAPA, Soderstrom in the outermost circumferential position on the disk as taught in Hwang. Their motivation would have been to enable higher access speed of the multi-session disk (column 4, lines 21-26).

49. With respect to claim 24, the combination of AAPA, Soderstrom, and Hwang teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 29 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

50. Claims 29-30 rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA and Soderstrom as applied to claim 27 above, and further in view of Ohmi.

51. With respect to claim 29 Ohmi teaches of if an instruction is received to modify the first generation set of data, failing to carry out the instruction (paragraphs 0131-0137; it is abundantly clear to one of ordinary skill in the art, that when a request to change data while the write protection is enabled, that request is not implemented).

52. It would have been obvious to one of ordinary skill in the art having the teachings of AAPA, Soderstrom, and Ohmi at the time of the invention to incorporate write protection in the re-writable media of the combination of AAPA and Soderstrom. Their motivation would have been to prevent the user from accidentally overwriting desired data (Ohmi, paragraph 0137).

53. With respect to claim 30, the combination of AAPA, Soderstrom, and Ohmi teaches of a computer readable carrier containing computer program instructions which, when run on a computer, cause the computer to perform the method of claim 29 (it is abundantly clear to one of ordinary skill in the art, that as the previously cited method

occurs within computer system, there must be software stored at some location that carries out the previously mentioned tasks).

Conclusion

54. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

55. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Krofcheck whose telephone number is 571-272-8193. The examiner can normally be reached on Monday - Friday.

56. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

57. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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